(BP) test with methacholine. A 10% daily variability of PEFR for at least half of the monitoring days was considered an index of bronchial hyperresponsiveness (BHR). BP results were scored as: moderate-severe BHR ($PC_{20}FEV_1$ < 4 mg/ml), mild or border-line BHR ($PC_{20}FEV_1$ 4–64 mg/ml). Thirty-one subjects showed a bronchial obstruction, reversible in 27 of them; the remaining 4 subjects showed a reversible airway obstruction after 2-week treatment with inhaled steroids. Twenty subjects performed PEFR monitoring and BP; 5 were identified to have BHR by the analysis of PEFR and 3 of these had a severe-moderate BHR at the BP test. BP test revealed 12 patients with severe-moderate BHR and 8 with mild BHR. We conclude that asthma diagnosis can be done, in a majority of patients, by detecting a reversible bronchial obstruction and that PEFR monitoring should not be considered a necessary step in the algorithm suggested for the diagnosis of asthma. However, PEFR monitoring could be delayed to further confirm the diagnosis of asthma in those patients with mild or border-line BHR.

P2830

Determinants of Willingness to Participate in Self Management Asthma Programs

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Introduction: A lot of studies have been performed on self management of asthma programs (SMAP). Controlled studies did not detect a significant improvement of clinical outcome. A possible explanation is that SMAP were also given to patients not interested (and thus not compliant) in such programs. In this *pilot*-study we describe the willingness of asthma patients from one general practice to participate in a SMAP. Potential determinants studied included age, education, gender, severeness and/or duration of disease and smoking habits.
Methods: All asthma patients known to the general practitioner between 18–50 years were invited. All patients had a spirometry assessment, made an assessment of disease severity on a VAS-scale, control of inhaler technique, an interview using Wilsons criteria (Am J Med 1993; 94:564–75) and finally their willingness to participate in a SMAP was assessed.
Results: 23 patients (8 male) out of 31 participated. Mean age ± SD was 41 ± 9 years, mean duration of asthma 18 ± 15 years. Overall inhaler technique was insufficient in 5 patients. Objective and subjective severeness had 9 disconcordant pairs. 14 Participants were willingly to participate in a SMAP. This study could not detected a relation between education and willingness.
Conclusion: Not all patients want to participate in a SMAP. Determinants of willingness are: age, sex, objective and subjective severeness of asthma.

P2831

Initial PEF as Predictor of Respiratory Failure in Asthmatic Patients

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The respiratory failure (RF) is one of the possible consequences of bronchial asthma (BA) exacerbations. The aim of this study was to determine the validity of PEF as predictor of RF.
Ninety five patients (70 females, mean age 37.8 ± 14.2 yrs) presenting to a hospital with asthma exacerbations were studied. The severity of BA was assessed according to the symptoms, observation and lung function proposed by the International consensus report from 1992. These patients had initial PEF and arterial blood gases measured whilst breathing air. The initial PEF as a percentage of predicted was estimated by reference to a standard nomogram.
There was no correlation between initial PEF and PaO2 ($r = 0.27$, $p > 0.05$). On admission, there were 65 patients (68%) with RF. Forty one patients had a PaO2 < 8kPa, five had PaCO2 > 6kPa and 19 had both. All patients with RF had initial PEF less than 260 l/min or 52% of predicted.
We conclude there is high incidence of RF in BA exacerbations (68%) and no correlation between initial PEF and PaO2. These results support the recommendation that asthmatics presenting to a hospital with a PEF less than 50% of predicted value should have arterial blood gases estimated.

P2832

An Analysis and Comparison of Asthma Chronic Disease Management Programme (CDMP) Data, and Prescribing Analysis and Cost (PACT) Data in Suffolk

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Introduction: The asthma CDMP is an organized programme for management of patients with asthma in primary care. Data is collected on patient numbers, age and sex, numbers on prophylactic medication, and hospital admissions. PACT data is an analysis of all prescriptions dispensed.
Method: 1994–5 CDMP data reported to Suffolk Health was analysed and where appropriate compared with PACT data (three month period in 1995).
Results: 1. CDMP asthma incidence

	Ages 0 – 14	All age groups
Mean reported incidence	10.3%	6.7%
Range	2.2%–30.1%	1.6%–14.7%

2. PACT Mean Bronchodilator prescribing/CDMP reported asthmatic = 1.7 items/3 months (range 0–6.87)
3. CDMP Mean % of asthmatics on prophylactic therapy = 60.25% (5.2%–120.7%)
4. PACT Mean prophylactic/Bronchodilator prescribing rate = 1.64 (range 1.37–2.66)
5. Mean Variation between CDMP % of asthmatics on prophylactic therapy and PACT prophylactic/Bronchodilator prescribing rate = 1.17 (range 0.06–2.91)
6. Mean hospital admissions = 6.9 (range 0–44). No relationship was found between prophylactic prescribing and admissions
Discussion – In Suffolk general practices (1994–5):
Reported adult (1.6%–14.7%) and paediatric (2.2%–30.1%) asthma diagnosis appears to show considerable variance.
Reported and recorded prescribing data appears to show considerable variance.
Reported prescribing practice does not appear, in general, to relate to recorded prescribing data.

P2833

Evaluation of an Education Program in the Follow Up of Asthma Patients

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We had developed an education program (EDUCASMA) based on International Guidelines (NIH-USA-1992). We applied them on 300 patients which results were presented in ERS Annual Congress, Barcelona 1995 (Abst: 2576-; Europ. Resp. J). After a follow up period of 14 +/– 4 months we were able to obtain results of clinical, functional, quality of life scores and treatment compliance.
Patients' Treatments were conducted by: pneumonologist on a regular monthly schedule (group A n = 29); pneumonologist on a monthly schedule partially fulfilled (group B n = 13 ptes); generalist (group C n = 8 ptes).
Results: After the follow up period FEV1 and PEFR were not significant different as a whole or in each individual group. (FEV1 = 76.3 +/– 24.7; reevaluation FEV1 = 77.64 +/– 23, p = 0.55 t Test n = 50). One subgroup of ptes who had initially FEV1 below 60% of predicted values show an significant improvement (n = 12; 44.3 +/– 9.6% to 58.3 +/– 13.3; p = 0.007 t Test).
Seven possibles limitations in the daily activities (Quality of life) improved significantly after education (n = 50; p = 0.0001). These changes were not recorded in group C (n = 8, Wilcoxon Rank Test p > 0.05).
Asthma Severity (AS) was evaluated by an score using emergency visits number and nocturnal asthma degrees before and after education program.
We detected improvement in A and B groups (p < 0.02) but not in C group (p > 0.6).
Compliance of treatment improved in group A (p = 0.01 t Test). Improvements significant were not found in B and C.
Conclusions: Education was in this experience an useful tool in asthma treatment improving quality of life, compliance of treatment and severity of asthma. It was more effective in ptes who were seen by pneumonologist using actual guidelines management including habitual programmed visits.

P2834

Discriminative and Evaluative Properties of a New Simple Measure of Quality of Life in Asthma

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The AQ20 is a new short and simple, 20 item asthma specific quality of life (QoL) questionnaire designed for routine clinical use which takes 2.5 minutes to complete and score. Its discriminative and evaluative properties have been examined by comparing its performance with that of 2 more complex measures - the St. George's Respiratory Questionnaire (SGRQ) and the Asthma Quality of Life Questionnaire (AQLQ). 90 asthmatic patients (59 = female) completed the 3 questionnaires at baseline and again 12 weeks later (n = 75). Mean age was 46 years (range 17–79), mean FEV_1 was 72.5 ± 24.8 (sd) % predicted. At baseline, the correlation between the AQ20 and the SGRQ Total score was 0.86 and between the AQ20 and the AQLQ Total score it was –0.80 (both $p < 0.0001$). The correlation between change (Δ) in AQ20 and ΔSGRQ Total score was 0.45 ($p < 0.0001$) and between ΔAQ20 and ΔAQLQ Total score it was –0.42 ($p = 0.0002$). To estimate the degree of change between assessments, the coefficient of variation for the change in scores was calculated as the standard deviation of the difference between the two measurements divided by the mean, expressed as a percentage. The AQ20 and the SGRQ showed the greatest change between assessments (cv = 28% for both). The cv for the AQLQ was 17%. This suggests that the AQ20 may be at least as responsive as the AQLQ. However, responsiveness to change can only be tested fully in an intervention study. We conclude that the AQ20 may have similar properties to more complex measures.

P2835

Changes in Clinic Practice and Control of Asthma, as Assessed by Actual/Best Pef Over 14 Years, 1980-1993/4

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Major efforts have been made to improve asthma management in the last 20 years, particularly with appropriate prophylactic inhaled corticosteroids (INH.ST).